

# PATENT SPECIFICATION

1,138,291



DRAWINGS ATTACHED

1,138,291

Date of filing Complete Specification: 12 Sept., 1966.

Application Date: 14 June, 1965.

No. 24938/65.

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Index at acceptance:—A4 F (29A1E2, 29A3AX)

Int. Cl.:—A 47115/16

## COMPLETE SPECIFICATION

### Dish Washing Device

We, EDWARD GELLES and RONALD WINNETT, both of The Priory, Priory Lane, London, S.W.15, and both British Subjects do

rests on the rectangular base to receive cutlery 45  
and other small articles to be washed.

The means for connecting the frame to the

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## ERRATA

SPECIFICATION No. 1,138,291

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10 Page 1, line 31, for "unstanding" read "up-standing"  
Page 1, line 45, for "rectangangular" read "rect-angular"  
Page 1, line 70, for "devic" read "device"  
1 Page 2, line 30, for "twoards" read "towards"  
Page 2, line 54, for "thecover" read "the cover"  
Page 2, line 77, for "an" read "can"

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THE PATENT OFFICE  
17th February 1969

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members are telescopic so that the dimensions of the frame can be altered to suit ranging sizes of sink or container.

The frame of the washing device advantageously comprises a rectangular base and a plurality of unstanding tubular loops or coils extending transversely across the base between which the articles to be washed are maintained in the desired washing position. The bores in the frame members preferably are so arranged that the jets of liquid issuing therethrough impinge on the articles to be washed at acute angles. The frame may also include tubular Posts, preferably extending substantially vertically from the base members to receive cups and other cup like articles to be washed. Preferably the free ends of these posts are forked. There may also be provided a tray having a perforated base which fits into or

which is a perspective view of the device.

Referring to the drawing, the device comprises a tubular frame having a rectangular base constructed from two side members 1 and two end members 2 which are connected together at their ends to enable free passage of liquid through the base. Each of the members 1 and 2 is formed from two tubes which are slidable telescopically one within the other.

A number of tubular loops 3 which in their central portions stand above the plane of the base extend across the width of the base between the side members 1 and are connected with the side members 1 such that liquid can flow from the side members 1 through the loops 3. Each loop 3 is formed from two tubes telescopically slidable one within the other.

Each side member 1 carries two vertical posts 4 the free ends 5 of which are forked and the other ends of which are joined near

[Price 4s. 6d.]

SEE ERRATA SLIP ATTACHED

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## COMPLETE SPECIFICATION

### Dish Washing Device

We, EDWARD GELLES and RONALD WINNETT, both of The Priory, Priory Lane, London, S.W.15, and both British Subjects do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a washing device, more particularly to a dish washing device, and especially to a dish washing device that can be easily placed in and removed from a domestic sink or other container.

The invention provides a dish washing device which comprises a frame constructed of interconnected tubular members for receiving and supporting the articles to be washed and having a plurality of bores extending through their walls through which washing liquid or liquids piped under pressure into the frame can be forced in jets to impinge on articles supported in the frame and means for connecting the frame to a source of pressurised washing liquid.

Preferably at least some of the frame members are telescopic so that the dimensions of the frame can be altered to suit ranging sizes of sink or container.

The frame of the washing device advantageously comprises a rectangular base and a plurality of unstanding tubular loops or coils extending transversely across the base between which the articles to be washed are maintained in the desired washing position. The bores in the frame members preferably are so arranged that the jets of liquid issuing therethrough impinge on the articles to be washed at acute angles. The frame may also include tubular posts, preferably extending substantially vertically from the base members to receive cups and other cup like articles to be washed. Preferably the free ends of these posts are forked. There may also be provided a tray having a perforated base which fits into or

rests on the rectangular base to receive cutlery and other small articles to be washed.

The means for connecting the frame to the source of pressurised washing liquid is preferably a pipe one end of which is connected to the frame and the other end of which is capable of being connected to a domestic water tap.

The means for connecting the frame to the source of washing liquid preferably includes means for metering a liquid detergent into the washing liquid. Such metering means may, for example, be a device as described in Specification No. 46257/65 and 27415/66 (Serial No. 1,138,292).

The frame may be made from any desired material, for example, metal, for example steel, or a plastic material. The frame members are preferably of the order of  $\frac{1}{2}$  inch external diameter and the bores therein are preferably of the order of 1 mm diameter.

One form of the device will now be described in greater detail by way of example, with reference to the accompanying drawing which is a perspective view of the device.

Referring to the drawing, the device comprises a tubular frame having a rectangular base constructed from two side members 1 and two end members 2 which are connected together at their ends to enable free passage of liquid through the base. Each of the members 1 and 2 is formed from two tubes which are slidably telescopically one within the other.

A number of tubular loops 3 which in their central portions stand above the plane of the base extend across the width of the base between the side members 1 and are connected with the side members 1 such that liquid can flow from the side members 1 through the loops 3. Each loop 3 is formed from two tubes telescopically slideable one within the other.

Each side member 1 carries two vertical posts 4 the free ends 5 of which are forked and the other ends of which are joined near

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SEE ERRATA SLIP ATTACHED

the ends of the side member 1 such that liquid in the side members 1 can enter the posts 4.

Bores 6 extending through the walls of the side and end members 1 and 2 of the base, the loops 3, and the forked ends 5 of the posts 4 are so arranged that liquid issuing under pressure from the bores 6 in the members 1 and 2 and loops 3 will strike the surface of the plates and other substantially flat dishes placed between the loops 3 at acute angles, and liquid issuing from the bores 6 in the forked ends 5 of the posts 4 will strike the inside surface of cups or other cup-shaped articles placed thereon at acute angles.

15 A pipe 7 is connected to one of the end members 2 and at its free end (not shown) is formed such that it can be attached to a domestic water tap. The pipe 7 contains a metering device 8 of the type described in Specification No. 46257/65 and 27415/66 (Serial No. 1,138,292) for metering liquid detergent into a stream of liquid passing through the pipe 7.

20 A rectangular tray 9, the base of which has a number of perforations 10 rests on the base of the frame of the device and is supported on the end members 2 by extensions 11 of its longer sides.

The frame is supported on four feet 12, one towards each corner, which raise it above the surface on which it stands.

In operation the frame is placed in a sink after it has been adjusted to the desired size by lengthening and/or shortening the side and end members 1 and 2 of the base and the pipe 7 is attached to the hot water tap. Dishes are placed between the loops 3, cups are placed on the forked ends 5 of the posts 4 and cutlery is placed in the tray 9.

40 When the tap is turned on the pressure of the water continually forces a metered amount of liquid detergent out of the metering device into the stream of water. The water enters the frame and is forced out of the apertures and strikes the articles in the frame with sufficient force to remove food particles etc.

When the detergent is used up clean water passes through the frame and emerges from the bores 6 so that the articles in the frame are rinsed.

50 The device preferably also includes a cover (not shown) for the frame which prevents undue splashing of the washing and/or rinsing liquid, the cover having an opening for the passage of the pipe 7.

The device of the invention is thus a very simple dish washing apparatus that can be used in the domestic sink and utilizes the pressure of the domestic water supply. After the washing and rinsing operations the device may be lifted from the sink complete with the clean

articles which can be allowed to drain dry while still in the device.

#### WHAT WE CLAIM IS:—

1. A dishwashing device comprising a frame constructed of interconnected tubular members for receiving and supporting the articles to be washed and having a plurality of bores extending through their walls through which washing liquid or liquids piped under pressure into the frame can be forced in jets to impinge on articles supported in the frame and means for connecting the frame to a source of pressurised washing liquid. 65
2. A device as claimed in claim 1, wherein at least some of the frame members are telescopic so that the dimensions of the frame can be altered. 70
3. A device as claimed in claim 1 or claim 2, wherein the arrangement of the frame members and the bores therein is such that the jets of liquid issuing from the bores impinge on the articles to be washed at acute angles. 75
4. A device as claimed in any one of claims 1 to 3, wherein the frame comprises a rectangular base and a plurality of upstanding tubular loops or coils extending transversely across the base. 80
5. A device as claimed in claim 4, wherein the frame also includes vertical tubular posts. 90
6. A device as claimed in claim 5, wherein the free ends of the tubular posts are forked. 95
7. A device as claimed in any one of claims 4 to 6, wherein there is also provided a tray having a perforated base which fits into or rests on the rectangular base of the frame. 100
8. A device as claimed in any one of claims 1 to 7, wherein the means for connecting the frame to a source of washing liquid includes means for metering a liquid detergent into the washing liquid. 105
9. A device as claimed in claim 8, wherein the metering means is a device as described and claimed in Specification No. 46257/65 and 27415/66. 110
10. A device as claimed in any one of claims 1 to 9, wherein the means for connecting the frame to the source of washing liquid comprises a pipe, one end of which is connected to the frame and the other end of which is capable of being connected to a domestic water tap. 115
11. A device as claimed in any one of claims 1 to 10, which also includes a cover for the frame which has an opening to allow passage of a pipe for connecting the frame with the source of washing liquid. 120
12. A device as claimed in claim 1, constructed substantially as described herein with reference to and as shown in the accompanying drawing. 120

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1138291 COMPLETE SPECIFICATION  
1 SHEET This drawing is a reproduction of  
the Original on a reduced scale

